

A NEW DISTRIBUTION RECORD AND A MORPHOLOGICAL
VARIANT OF *TERPNACARUS GLEBULENTUS* THERON
(ACARI: TERPNACARIDAE)¹

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ABSTRACT: A new distribution record and morphological variant of *Terpnacarus glebulentus* Theron from South Dakota (Acari: Terpnacaridae).

Members of the genus *Terpnacarus* Grandjean have recently been studied by Theron (1976) and a new species, *T. glebulentus* Theron was described from South Africa. Members of the genus *Terpnacarus*, to our knowledge, have not been recorded from the United States except for the statement by Krantz (1970, 1978) of an undescribed species from Oregon.

Recent ecological soil surveys in South Dakota revealed specimens so similar to *T. glebulentus* Theron, collected from South Africa, that we have elected to regard them, for the present, as belonging to this species.

Sixty-two adult females were collected 1 mile south of Chester, South Dakota by B. McDaniel, April 11, 1977 near the shore of Lake Madison under *Elaeagnus angustifolia* L. (Russian Olive Tree) with a stand of *Panicum virgatum* (Switchgrass) with an understory of *Poa pratensis* (Kentucky bluegrass) and sedges.

The adult females can be divided into 2 groups, depending on the number of internal genital setae. The holotype female, as well as 17 female paratypes from South Africa and all South Dakota females, bears 2 pairs of internal genital setae while 3 pairs are present in 6 of the female paratypes from South Africa. There is also a difference in the hysterosomal setal formula which ranges from 22 pairs (2-2-2-2-2-4-4-4) on females collected from South Dakota to as high as 24 pairs (2-2-2-2-2-4-5-5) on the holotype female, along with 17 female paratypes. The 6 female paratypes with 3 pairs of internal setae have a hysterosomal setal formula totaling 23 pairs (2-2-2-2-2-4-4-5). The variation in the hysterosomal setal formula involves the posterior 2 rows in each case. There is a slight difference in the leg chaetotaxy of the 2 groups found in South Africa.

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It should be pointed out that the two South African forms, those females with 2 and 3 internal genital setae, were found to appear sympatrically in several localities and eggs have been found in both groups.

In a study of the life cycle of *T. glebulentus*, Theron (1976) was only able to obtain females through nine generations and stated that the probability exists that reproduction is entirely parthenogenetic. This is upheld thus far as no males were found and several females contained eggs within their body in the material collected from South Dakota.

REFERENCES

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